

BEFORE THE FISH AND WILDLIFE COMMISSION
OF THE STATE OF MONTANA

In the matter of the adoption of New)	NOTICE OF ADOPTION AND
Rule I pertaining to Grizzly Bear)	TRANSFER
Demographic Objectives for the)	
Northern Continental Divide)	
Ecosystem and the transfer of ARM)	
12.9.103)	

TO: All Concerned Persons

1. On August 24, 2018, the Fish and Wildlife Commission (commission) published MAR Notice No. 12-505 pertaining to the public hearings on the proposed adoption and transfer of the above-stated rules at page 1647 of the 2018 Montana Administrative Register, Issue Number 16.

2. The commission has transferred the above-stated rule as proposed.

3. The commission has adopted the above-stated rule as proposed: New Rule I (12.9.1403).

4. The commission appreciates all the comments it received on this rulemaking and has thoroughly considered the comments and testimony. In the responses below, it is frequently noted that a comment is outside the scope of this rulemaking. That means that the comment is not directly related to this proposed rule or any of its elements. However, as is evident from both the number and content of the comments, the commission is aware that grizzly bear management in general is a matter of high importance to the people of Montana. The commission appreciates the passion shown through the public's participation in this process and will keep all comments in mind as it proceeds with this and other grizzly bear management decisions. The following acronyms are used frequently in these responses:

ARM: Administrative Rule of Montana

ESA: Endangered Species Act

FWP: Montana Department of Fish, Wildlife and Parks

NCDE: Northern Continental Divide Ecosystem

DMA: Demographic Monitoring Area

GYE: Greater Yellowstone Ecosystem

A summary of the comments received and the department's recommended responses based off the department's recommendation for the commission are as follows:

Comment #1: The commission received comments both in support of, and in opposition to, hunting grizzly bears in Montana.

Response #1: These comments are outside the scope of this rulemaking. The commission is not proposing a hunting season for grizzly bears at this time, as the grizzly bear is not delisted from the Endangered Species Act. If the grizzly is delisted, and the commission then proposes a hunting season, a separate process and opportunity for public comment will be held. Additionally, if the commission were to establish a grizzly bear hunting season per 87-5-302 MCA, when special grizzly bear licenses are to be issued pursuant to 87-2-701 MCA, the commission shall establish hunting season quotas for grizzly bears that will prevent the population of grizzly bears from decreasing below sustainable levels.

Comment #2: The commission received comments both in support of, and in opposition to, delisting the grizzly bear from the Endangered Species Act.

Response #2: These comments are outside the scope of this rulemaking. The commission does not have the authority to delist a species from the Endangered Species list, only the United States Fish and Wildlife Service can delist a species from the Endangered Species Act.

Comment #3: The commission received comments requesting that public comment be opened up on the entire Conservation Strategy, not just Chapter 2.

Response #3: The commission has proposed a specific administrative rule that would adopt demographic objectives that are described in the Conservation Strategy (2018). The public comment on the rule follows specific administrative requirements associated with rule adoption. The Conservation Strategy is an interagency document that involves components outside of the authority of the commission and scope of the administrative rule. Therefore, public comment on the Conservation Strategy is outside the scope of this rulemaking.

Comment #4: The commission received comments suggesting that a statewide management plan be put into place that would establish a framework for such things as carcass removal, future hunting, conflict management, road density management, and funding.

Response #4: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. There are already management plans in place that do address conflict management, tolerance, distribution, etc. These issues are also addressed in the Conservation Strategies for the GYE and NCDE. FWP is considering development of a statewide plan that would incorporate

and distill portions of all these existing plans as well as address issues such as connectivity. However, that will be a lengthy endeavor and shouldn't change the demographic objectives for the NCDE DMA outlined in the proposed rule.

Comment #5: The commission received comments regarding funding. Some comments suggested license dollars for a grizzly hunt would provide necessary funding. Conversely, comments also asserted that license dollars would not be enough for funding.

Response #5: FWP currently spends approximately \$1 million/year on grizzly bear management across the state. Hunting license revenue is not a driver of current or future grizzly bear management. If the commission decided to proceed with a hunting season, it would be very conservative and limited by the demographic objectives described in the proposed rule. As such, based on license prices in statute (\$150/resident license and \$1,000/nonresident license), grizzly bear hunting license revenue would likely be insignificant.

Comment #6: The commission received comments in support of connectivity and linkage between the GYE, NCDE, Selway-Bitterroot, Selkirk and Cabinet-Yaak. Some comments suggested that this connectivity is crucial and necessary to establish sufficient recovery and genetic diversity.

Response #6: FWP supports genetic and/or demographic connectivity between the grizzly bear populations in Montana and the Bitterroot Recovery Zone, as described in the Conservation Strategy (2018) and the two state Grizzly Bear Management Plans. The methods described in the proposed rule provide for maintaining a population level within the DMA which will offer dispersal opportunities.

Comment #7: The commission received comments in opposition to the proposed rule stating that maintaining the population at 800 grizzlies in the NCDE is not sufficient or adequate to establish a recovered population or connectivity and genetic diversity. The commission received a varied amount of suggested viable population numbers for the NCDE, from 1000 up to 9000.

Response #7: Our population objective calls for maintaining a 90% probability that the population will remain above 800 bears. Because our population monitoring currently does, and always will include a significant margin of error, it means that an estimated population size of roughly 1000 bears or more will be maintained indefinitely. To put this number in context, 1000 bears within the ~42,600 km² DMA represents an overall population density of about 24 bears/1000 km². This overall population density for the DMA is comparable to or exceeds reported densities of many interior populations in northern Alberta (18 bears/1000 km²), northern British Columbia (23–33 bears/1000 km²), Yukon Territories (28–37 bears/1000 km²), Northwest Territories (4–12 bears/1000 km²), and Alaska (4–15 bears/1000 km²), many of which are more remote than the NCDE (McLellan 1994, Mowat et al. 2005). Although direct comparisons should be viewed with some caution, due to variations

in methods and the fact that many study areas were likely placed in higher quality habitats than surrounding areas (Mowat et al. 2005), we believe that this indicates the proposed population objective is consistent with a healthy, self-sustaining population size. The genetic diversity of the NCDE population is relatively high (Proctor et al. 2012), therefore there are no concerns about the long-term genetic health of the NCDE population. Whereas population viability modeling typically evaluates the probability of extinction of a population, our objective calls for population modeling that will continually evaluate the probability that the population is above 800 bears – a much higher bar.

The objectives in the proposed rule will result in conditions conducive to continuing dispersal of subadult bears out of the DMA, providing for potential emigration into other populations or recovery zones. Natal dispersal is the movement of subadult animals away from the home range they shared with their mother. In grizzly bears, natal dispersal is generally male-biased. Females often set up home ranges overlapping or adjacent to their mother, but males generally move longer distances away, likely to reduce the probability of inbreeding. Additionally, evidence indicates that dispersal of both males and females is inversely density-dependent (Stoen et al. 2006). Subadult bears are more likely to disperse and generally move longer distances from their natal areas when bear density around them is lower. This is likely because at lower densities, dispersing individuals experience less intraspecific competition and are more apt to locate areas where they will have more exclusive access to resources. Consequently, in geographically distinct but expanding populations, we generally observe higher densities and smaller dispersal rates and distances in the “core” and lower densities and larger dispersal rates and distances near the periphery (Swenson et al. 1998, Kojola and Laitala 2000, Jerina et al. 2008). Interestingly, although male-biased dispersal rates typically result in male-dominated sex ratios near the periphery (Swenson et al. 1998, Kojola and Laitala 2000, Jerina et al. 2008), some evidence suggests that peripheral females and males dispersed similar distances from the core (Swenson et al. 1998, Kojola and Laitala 2000) and all studies documented at least some long-distance female dispersal (Swenson et al. 1998, Jerina et al. 2008). These studies all support what has been observed in the spatially expanding NCDE grizzly bear population. Kendall et al. (2009) documented a core-to-periphery density gradient centered in Glacier National Park. Most outlier verified observations have been males (when sex was determined), however females appear to be equally present within certain areas of newly occupied range, such as the East Front, the Salish Range, and the Flathead Valley. With overall density of 24 bears/1000 km² within the DMA, we expect that the density within the DMA will continue to be higher than in surrounding areas for the foreseeable future. Thus, there will continue to be a density-dependent effect leading to dispersal of outside of the DMA by some subadult individuals. If these individuals are successful in staying out of conflict and surviving in the more human-populated areas between ecosystems, they may succeed in moving between the NCDE and other populations. In areas which do not provide connectivity to other ecosystems, this dispersal

outside of the DMA may be regarded as socially unacceptable, which will require additional decision-making by FWP and the Commission involving additional public input.

Finally, net emigration will be incorporated into population modeling, as described in Appendix 3 of the Conservation Strategy (2018): “Given that the NCDE grizzly bear population has expanded and now some proportion of the population resides outside of the DMA, we are currently developing and evaluating additional inputs to the model to explicitly estimate this proportion and exclude those individuals from the population estimate as well as the probability that the population is above 800 bears within the DMA.” Thus, thresholds will be set relative to a population estimate that has already been adjusted to account for dispersing subadults.

Comment #8: The commission received comments in support of the proposed rule stating that the proposal was sufficient for grizzly bear recovery.

Response #8: The NCDE grizzly bear population has met and surpassed the recovery criteria as described in the Recovery Plan (1993), including the occupancy of reproductive females, the estimated population size, and the mortality limits, and is considered recovered by FWP. The demographic objectives in the proposed rule will ensure that the population continues to be healthy and viable.

Comment #9: The commission received comments suggesting that 800-1000 as a population size was too high. The comments referenced bears’ impact on elk and moose populations, and that they are being pushed out to areas that are not suitable habitat, such as farmlands, ranches, and towns. Some comments suggested that the current population is out of control and that grizzlies no longer fear humans. One of the comments suggested the proposed population number be reduced from 800 to 500.

Response #9: The criteria for occupancy of Bear Management Units within the Recovery Zone by reproductive females as described in the Recovery Plan (1993) was met at about the same time that the probability that the population was above 800 exceed 90%, which supports the population objective in the proposed rule. When the population was closer to 500 bears (likely in the 1980s or 1990s), the recovery criteria were not yet met. FWP recognizes the potential adverse impacts of grizzly bears on other species and humans and will strive to be responsive to them.

Comment #10: The commission received comments on elements of the Conservation Strategy that were not proposed in this rule, including comments asking that Montana not sign the Conservation Strategy.

Response #10: These comments are outside the scope of this rulemaking. The Conservation Strategy (2018) simply outlines how bears will be managed if delisted and documents the commitments of the management agencies to maintain a recovered population of grizzly bears. FWP played an integral part in development of the Conservation Strategy and supports its content.

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Comment #11: The commission received a comment regarding Yellowstone grizzlies and hunting in the park.

Response #11: This comment is outside the scope of this rulemaking. This rulemaking focuses on the NCDE only. Hunting is not allowed in Yellowstone or Glacier National Parks.

Comment #12: The commission received comments in opposition to hunting in or around Glacier National Park.

Response #12: These comments are outside the scope of this rulemaking. Hunting is not being proposed by the commission at this time as grizzly bears are still listed on the Endangered Species list. If the Commission were to consider hunting of NCDE bears after they are delisting, that would be done through a separate commission rule making process. Hunting in Glacier National Park is not allowed, and is beyond the authority of the commission.

Comment #13: The commission received a comment requesting reopening roads that have been closed for grizzly habitat to provide for increased recreational forest access.

Response #13: These comments are outside the scope of this rulemaking. Whether roads remain open or closed is up to the landowner/land management agency and is outside the scope of authority of the commission.

Comment #14: The commission received a comment questioning why a public hearing was not held in Choteau, MT, as well as a few comments both in criticism and in appreciation of the format of the public hearings.

Response #14: The commission held four public meetings spread out geographically to encompass most of the NCDE (Great Falls, Conrad, Missoula, and Kalispell), as well as had a 60-day public comment period. While the commission appreciates the interest of the public for more meetings in more places, there are limits and we are hopeful that between the public meeting locations and the opportunity to submit written comment, everyone had an opportunity to provide input.

Comment #15: The commission received comments concerning personal safety and livestock loss due to the increasing numbers of grizzly bears, particularly along the Rocky Mountain Front.

Response #15: While listed under the ESA, the U.S. Fish and Wildlife Service retains primary authority for grizzly bears. Upon delisting, the State of Montana will assume that authority. Per 87-5-301 MCA, it is the policy of the state to: (a) manage the grizzly bear as a species in need of management to avoid conflicts with humans and livestock; and (b) use proactive management to control grizzly bear distribution and prevent conflicts, including trapping and lethal measures. The commission recognizes the controversial nature and potential danger of grizzly bears and is

committed to addressing and minimizing those threats through active management, as described in Commission Policy (ARM 12.9.103).

Comment #16: The commission received comments suggesting that the range of grizzly bears should be broadened to closer to their historic range, as they currently only occupy 2% of their historic range.

Response #16: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. Recovery planning and criteria are established by the U.S. Fish and Wildlife Service. The approved recovery plan for grizzly bears calls for recovering grizzly bears in six recovery zones, and delisting those that meet recovery criteria.

Comment #17: The commission received comments stating that grizzly bears that die outside of the DMA aren't accounted for in the proposed ARM.

Response #17: The population estimate and the resulting thresholds are specific to the DMA. The proposed rule focuses on this area because it represents the core of the NCDE population, it was the focus of recovery efforts, and the preponderance of protected public land in this area will provide habitat for grizzly bears well into the future. The proposed rule does not codify management outside of the DMA, because it is valuable for FWP and the Commission to have discretion in making decisions about grizzly bears in the more human-dominated landscapes outside of the DMA.

Comment #18: The commission received comments calling for protection of suitable grizzly habitat, such as forests and wildernesses.

Response #18: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. Habitat protection measures are contained within agency land use plans and summarized in the Conservation Strategy (2018).

Comment #19: The commission received a comment suggesting that any problem female bears should be removed.

Response #19: Decisions to remove grizzly bears because of conflict are generally made on a case-by-case basis. Both female and male bears have been and will continue to be removed when conflicts are serious enough and/or bears are unlikely to discontinue their conflict behavior.

Comment #20: The commission received a few comments referencing the decision of *Crow Indian Tribe v. United States* and the impacts of the decision on the rulemaking proposal. Specifically, commenters noted their belief that under the *Crow* decision, FWS cannot move ahead with a proposal to delist the NCDE grizzly

population without evaluating the impact that delisting the NCDE would have on other grizzly populations.

Response #20: The proposed rule would bind FWP to a set of demographic objectives for management of the NCDE grizzly bear population upon delisting. In *Crow Indian Tribe v. United States*, the US District Court invalidated the rule under which the Fish and Wildlife Service removed the Yellowstone population of grizzly bears from the list of threatened species. Clearly, FWS must be cognizant of the *Crow* decision if it proceeds to delist the NCDE population of grizzly bears. While the *Crow* decision complicates the delisting process for NCDE, it is not clear from the decision that delisting of NCDE would not be lawful under any circumstance. As implied by the comments themselves, the *Crow* decision can be read to mean that the NCDE population cannot be delisted without the proper analysis of the impacts of delisting to other grizzly populations. It follows that if the proper analysis is performed, delisting the NCDE population is at least possible. Therefore, the proposed rule could be in effect. Additionally, unlike the current population estimation method in the GYE, the method for estimating the population size in the NCDE is unbiased, therefore we anticipate no need for recalibration – an issue cited in the *Crow* decision. In the event that the NCDE population is delisted, the commission feels that it is important to have population standards in place.

Comment #21: The commission received comments suggesting that it be a requirement for hunters to carry bear spray.

Response #21: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. FWP encourages not just hunters, but anyone who works or recreates outdoors in grizzly bear habitat to carry and know how to use bear spray.

Comment #22: The commission received a comment suggesting that FWP look at other ways of managing the population other than killing, such as neutering and birth control.

Response #22: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. Bears that are removed through killing/euthanasia typically have a history and behavior that precludes releasing them back into the wild. Neutering and birth control would not address that behavior.

Comment #23: The commission received several comments in support of general protection of grizzly bears.

Response #23: The commission feels that the demographic objectives in the proposed rule will maintain a recovered population in the NCDE and facilitate connectivity.

Comment #24: The commission received several general comments that there are too many bears.

Response #24: The demographic objectives in the proposed rule will maintain a recovered population in the NCDE and facilitate connectivity with other populations or Recovery Zones. The criteria for occupancy of Bear Management Units within the Recovery Zone by reproductive females as described in the Recovery Plan (1993) was met at about the same time that the probability that the population was above 800 exceed 90%, which supports the population objective in the ARM.

Comment #25: The commission received a comment suggesting that all FWP properties in the NCDE require food storage rules.

Response #25: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. **FWP OR COMMISSION?** adopted food storage regulations on all Wildlife Management Areas, Fishing Access sites, and State Parks.

Comment #26: The commission received comments calling for non-lethal conflict management.

Response #26: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. The FWP bear conflict specialist have many non-lethal approaches to conflict management. Lethal action is only taken when there is a human safety risk, there is nowhere to relocate the bear, or the bear causing the conflict has been a repeat offender.

Comment #27: The commission received a few comments calling for FWP to work and collaborate with the Department of Transportation for safe passages for bears on highways.

Response #27: FWP is working with MDT in identifying passage barriers for bears due to highway infrastructure. Efforts are underway for continued and better communication on this topic, and earlier inclusion of FWP in MDT planning processes. FWP has also collaborated with other scientists to model likely connectivity paths, and will use this information when working with MDT on wildlife crossings.

Comment #28: The commission received comments suggesting that the population number for the NCDE should be whatever the population size is at delisting.

Response #28: Setting a population objective based on an unknown date is arbitrary. The proposed rule ensures the population will be at or above 800 bears within the DMA post delisting, which is double what the recovery plan calls for to be recovered under the ESA. To meet the population objective in the proposed rule, there needs to be around 1,000 bears, which is close to the current population.

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Comment #29: The commission received comments suggesting that management should focus on more than just population numbers, such as habitat and connectivity.

Response #29: This proposed rule is focused solely on the demographic objectives outlined in Chapter 2 of the Conservation Strategy (2018), but FWP and other agencies have committed to management of habitat for grizzly bears as described in Chapter 3. FWP has issued food storage orders for all Wildlife Management Areas, Fishing Access sites, and State Parks in the NCDE and works to protect key parcels of grizzly bear habitat through our lands program.

Comment #30: The commission received comments suggesting that FWP needs to work on educating landowners on bear attractants and that a conflict reduction strategy should be put into place.

Response #30: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. A majority of the conflict specialist time is spent educating landowners, but there are many challenges including the turnover in property owners, the number of new residents, and an expanding grizzly bear population. FWP does have a Grizzly Bear Management Plan for Western Montana and it includes conflict management and an education and outreach section.

Comment #31: The commission received a comment questioning the effectiveness of the Conservation Strategy due to agency statements that it is not regulatory. The commenter suggests that the rule language be amended so that the rules go into effect when endangered species protections in the NCDE are lifted, rather than being operative when the Conservation Strategy is in effect.

Response #31: The commission appreciates this comment. The Conservation Strategy (2018) will be effective upon delisting. Therefore, the rule, if adopted, will be effective upon delisting. While the Conservation Strategy is not itself regulatory it is, at least in part, a compilation of rules and guidelines that are binding on individual signatories. The point of this rule making is to bind FWP through rule to its commitment to the Conservation Strategy. The commenter's suggestion has merit. However, because the rule directly reflects the language and standards of a portion of the Conservation Strategy, the commission feels it is appropriate to retain the language indicating that the rule operates when the Conservation Strategy is in effect.

Comment #32: The commission received a comment concerned with the 6-year running average. The commission also received a comment specifically supporting the 6-year running average.

Response #32: The 6-year running averages are meant to smooth annual estimates, so that time trends can be more readily observed. Annual differences in

rates or numbers might reflect true annual differences and/or they might reflect the random quality of our sample of the population. The 6-year time frame is meant to represent 2 reproductive cycles for a female bear. Given the health of the population and the long-lived characteristic of this species, 6 years is a good intermediate time frame, allowing us to smooth out annual variation, but still respond to potential changes in rates or numbers in a timely manner.

Comment #33: The commission received a comment that the statement that the rule purports to not “significantly affect” the operation of small businesses either failed to account for livestock mortality due to grizzly bears, or it doesn’t consider ranches as small businesses.

Response #33: The statute §2-4-111, MCA requires an agency that proposes a rule to determine if the rule will significantly and directly impact small business. The proposed rule notice states that the commission has determined that the adoption of the rule will not significantly and directly impact small business. While many ranches and farms qualify as a small business the proposed rule is not expected to significantly and directly impact those businesses. Some of these businesses do suffer livestock loss from grizzly bears, but it is not expected that passage of the proposed rule will result in a significant increase in loss. The scope of the rule’s commitment to a minimum population is limited to the demographic monitoring area. While FWP acknowledges that grizzly populations outside the demographic monitoring area are increasing, and the rule calls for monitoring demographic and genetic connectivity among populations, the rule itself does not call for an increase in population outside the demographic monitoring area. Monitoring contemplated by the rule will help FWP understand future populations and lead to better long-term management. Moreover, the minimum population inside the demographic monitoring area called for by the rule is already present, therefore the rule does not promote a population increase in the demographic monitoring area. In conclusion, the impact of the rule on small business through livestock depredation is not expected to be significant.

Comment #34: The commission received a comment suggesting that no apex predators should ever be reintroduced.

Response #34: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting.

Comment #35: The commission received a comment concerned that non-consumptive users have no say in conservation.

Response #35: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. FWP does not differentiate whether comments are from consumptive or non-consumptive users. All have the

same amount of say, for all FWP proposals for which public comment is being accepted.

Comment #36: The commission received a comment opposed to setting any threshold limit at all and that conflicts should be dealt with case-by-case.

Response #36: Conflicts are currently dealt with on a case-by-case basis and that will continue in the future. The thresholds take into account all causes of mortality and therefore are not specific to management removals. Mortality thresholds will not be considered if a management removal is deemed necessary to protect human safety. Mortality thresholds will be considered when deciding about other removals, however management removals will be prioritized over other discretionary mortality (i.e., hunting). Conflict response is described in more detail in the Conservation Strategy (2018).

Comment #37: The commission received comments calling for science-based management, and that feelings and emotions should not be a part of the management decisions. Conversely, comments were also received asking that spiritual and cultural significance of the grizzly bear be considered.

Response #37: FWP is utilizing science-based management, which includes an inter-agency population monitoring program and a system for setting occupancy, survival, and mortality thresholds to maintaining a healthy, viable population within the DMA. The objectives in the Conservation Strategy (2018) and the ARM will result in conditions conducive to continuing dispersal of subadult bears out of the DMA, providing for potential emigration into other populations or recovery zones. FWP regards grizzly bears as an integral part of the natural heritage of Montana and therefore recognizes their cultural and spiritual significance to the various peoples of Montana.

Comment #38: The commission received comments that the proposed rule is premature as it is based on the Conservation Strategy which is not yet finalized.

Response #38: The proposed rule addresses population objectives for grizzly bears post-delisting. The Conservation Strategy was approved by the NCDE Sub-Committee at its Spring 2018 meeting, and the Commission doesn't expect the objectives will change before final approval by the Interagency Grizzly Bear Committee (IGBC).

Comment #39: The commission received a few comments on the content of ARM 12.9.103, in particular the reference to sport hunting as the desired management tool.

Response #39: The proposed rule would renumber current ARM 12.9.103 for the purpose of better organizing the administrative rules. The proposal does not contain any amendments to the content of ARM 12.9.103.

Comment #40: The commission received a comment concerned that the rule didn't address what would happen should the population number drop below 800.

Response #40: The Conservation Strategy (2018) describes the following actions if the thresholds are not met: "A management review will be conducted if this distribution standard [i.e., ARM 3(a)] is not met, for example if only 20 of the 23 BMUs have documentation of females with offspring in the last six years...Discretionary mortality within the DMA will be curtailed until a management review is conducted if the six-year-average survival rate for independent females is below the six-year-average assigned threshold; or the six-year average number of TRUM for independent females or males is above the six-year average assigned threshold [i.e., ARM 3(b)(i-iii)]... If there are deviations from any of the population or habitat objectives stipulated in this Conservation Strategy, a Management Review will be completed by a team of scientists appointed by the members of the [NCDE] Coordinating Committee...A Management Review examines management of habitat, populations, or efforts of participating agencies and Tribes to complete their required monitoring. The purposes of a Management Review are: to identify the reasons why particular demographic, habitat, or funding objectives were not achieved; to assess whether a deviation from demographic, habitat, or funding objectives constituted a biological concern to the grizzly bear population in the NCDE; to provide management recommendations to correct deviations from habitat or population objectives, or to offset funding shortfalls; to consider departures by one or more agencies or Tribes from the monitoring effort required under this Conservation Strategy and to develop plans to ensure that monitoring efforts be maintained as per the standards in this document; and/or to consider and establish a scientific basis for changes/adaptations in management due to changed conditions in the ecosystem." The thresholds are designed to maintain a population well above the number 800, therefore if the thresholds are not met, the results of the management review should provide guidance for reversing any negative trend to keep the population from dipping below 800.

Comment #41: The commission received a few comments concerned that the proposed population number of 800 would become a target and that FWP would reduce the population to 800 and keep it at 800.

Response #41: The number 800 is not a target population size. All estimates have uncertainty and 800 is the designated lower bound of the estimated range of error. By specifically requiring a 90% probability that the population remains above 800 bears, the proposed ARM effectively prevents FWP from maintaining the population at only 800 bears.

Comment #42: The commission received a comment suggesting that FWP explore the possibility of posting the movements of collared bears and their locations online so that they could be looked up and avoided by people.

Response #42: In a given year, FWP's monitoring program radio-marks approximately 40 to 70 bears, in other words less than 10% of the population. FWP does not provide detailed information about this small fraction of the bear population because: (a) it would give the false impression that other locations are not currently occupied by bears, (b) it contradicts our message to the public to be prepared for potential encounters with bears within much of western Montana, and (c) it might compromise the security of the bears themselves.

Comment #43: The commission received a comment suggesting that language be added to New Rule I about hunting upon delisting as a management tool.

Response #43: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. ARM 12.9.103 already identifies hunting as a preferred population management tool. Additionally, if the grizzly is delisted, and the commission then proposes a hunting season, a separate process and opportunity for public comment will be held. Additionally, if the Commission were to establish a grizzly bear hunting season, per 87-5-302 MCA, when special grizzly bear licenses are to be issued pursuant to 87-2-701 MCA, the commission shall establish hunting season quotas for grizzly bears that will prevent the population of grizzly bears from decreasing below sustainable levels.

Comment #44: The commission received a comment that the number of independent males in section 3(b)(iii) of New Rule I be increased from the proposed 15% to 20%.

Response #44: Modeling suggests that although an estimated independent male mortality rate of only 20% is sustainable when female mortality is maintained at our current rate of 5%, lower male rates are necessary for maintaining long-term sustainability if female survival rates are higher. Additionally, modeling indicates that when male mortality is around 20%, mean age of males is quite low and female:male sex ratio is high. Therefore, the 15% mortality rate for males is meant to keep the population sex-age structure more natural. Additionally, because both females and males are involved in conflicts, the proposed objectives resulting in more even sex ratios and more equal numbers of allowed mortalities will maximize our ability to deal with conflict bears while maintaining the population objective.

Comment #45: The commission received a comment suggesting that language be added to New Rule I that grizzly bear management actions are not dependent on population modeling.

Response #45: Decisions about management removals are generally made on a case-by-case basis. Both female and male bears have been and will continue to be removed when conflicts are serious enough and/or bears are unlikely to discontinue their conflict behavior. Mortality thresholds will not be considered if a management removal is deemed necessary to protect human safety. Mortality thresholds will be

considered when deciding about other removals, however management removals will be prioritized over other discretionary mortality (i.e., hunting). Conflict response is described in more detail in the Conservation Strategy (2018).

Comment #46: The commission received a comment suggesting that over-abundant bears could be trapped and relocated to other states that historically had grizzlies.

Response #46: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. Montana could consider providing bears to other states for recovery purposes, but that request would need to come from the receiving state and be part of approved recovery/conservation efforts. Trapping and movement of bears outside of the ecosystem will count as a mortality against the mortality thresholds described in the proposed rule.

Comment #47: The commission received a comment suggesting that Zone 3 be expanded to the Montana state line in case grizzly bears continue to expand further east.

Response #47: The final determination of the Zone 3 boundary will be contingent upon the final federal delisting rule and will follow the DPS boundary designation determined by the U.S. Fish and Wildlife Service.

Comment #48: The commission received comments urging FWP to work with other state and federal land management agencies to secure strong habitat protections throughout the ecosystem.

Response #48: FWP has been working closely with land management agencies for several decades to ensure adequate habitat protections are in place to ensure recovery of grizzly bears. The commitment of the land management agencies to continue to protect important habitat is described in land use plans (e.g., Forest Plans) and in the Conservation Strategy (2018).

Comment #49: The commission received comments regarding the economic value of grizzly bears to remain alive and protected, stating that grizzlies are worth more to Montana alive, due to the many tourists who visit Montana to view them. Many also expressed a strong opposition to “trophy hunting”.

Response #49: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. With delisting and adoption of the proposed rule, there will remain a robust, recovered, and likely expanding population of grizzly bears that can potentially be viewable to the public. If the grizzly is delisted, and the commission then proposes a hunting season, a separate process and opportunity for public comment will be held. Additionally, if the commission were to establish a grizzly bear hunting season, per 87-5-302 MCA, when special grizzly bear licenses are to be issued pursuant to 87-2-701 MCA, the commission

shall establish hunting season quotas for grizzly bears that will prevent the population of grizzly bears from decreasing below sustainable levels.

Comment #50: The commission received comments that problems with grizzly bears are caused by people by not securing garbage properly and encroaching on their habitat, some commenting that FWP needs to educate the public to reduce our impact on grizzly bears.

Response #50: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. FWP has employed grizzly bear conflict specialists for decades and they spend a majority of their time educating the public in an effort to reduce conflicts with bears. This will be an ongoing challenge as we have an expanding human population and expanding grizzly bear population. In the NCDE where humans recreate on public lands we do have food storage orders in place to reduce the chances of a bear getting into conflict with humans.

Comment #51: The commission received comments that declining insect populations and wild bee populations will have an adverse impact on grizzlies, as they pollinate food sources that the bears depend on.

Response #51: Our current and proposed monitoring program will continually document survival and reproductive rates. If there are environmental impacts on foods that adversely impact these rates, we will be able to detect them and account for them in our population modeling. To counteract any potential population decline due to lower reproductive rates, survival thresholds can be set to higher rates and mortality thresholds can be set to the lower numbers to facilitate population growth.

Comment #52: The commission received comments suggesting that the male reproductive organs of grizzlies be examined for congenital malformations, if accidentally or intentionally killed, to determine the ability of Montana's grizzly to sustain the population.

Response #52: FWP has no information to suggest that congenital malformations are an issue with the NCDE grizzly bear population or are limiting the population.

Comment #53: The commission received comments in support of the proposed rule with further assessment on the southern portion of Zone 3 and the potential connectivity between the GYE and NCDE.

Response #53: Although the Little Belt, Castle, and Crazy Mountains have not been identified as the most predicted routes for movement between the NCDE and GYE (Peck et al. 2016), FWP recognizes that they still represent a possible connectivity corridor. As described in the Conservation Strategy (2018), "In Zone 3, grizzly bear occupancy will not be actively discouraged. Grizzly bears will not be captured and removed just because they occur in Zone 3, nor will they be captured and removed from Zone 3 unless there are conflicts that can only be resolved by capture and

relocation or removal of the offending bear. Grizzly bears will be managed primarily through conflict response.” The proposed ARM calls for the continued monitoring of bear distribution, including outlier observations. As more bears move outside of the DMA and provide real information about corridors, FWP will respond with increased education and conflict response in those areas.

Comment #54: The commission received comments stating that we need a connect-and-recover strategy instead of a divide-and-conquer strategy.

Response #54: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. FWP feels that the demographic objectives in the proposed rule will maintain a recovered population in the NCDE and facilitate connectivity.

Comment #55: The commission received comments requesting that we do everything possible to give potential corridors the highest level of security for bears.

Response #55: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. FWP does not have management authority over most of the known and potential corridors, but does support ensuring those remain secure for transit by grizzly bears and other wildlife. Security of corridors for grizzly bears also requires tolerance by landowners and land users, which generally results from quick and professional responses to conflicts.

Comment #56: The commission received comments supporting allowing the grizzly bears to expand into the Missouri Breaks and CM Russell Wildlife Refuge.

Response #56: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. As stated in FWP management plans, grizzly bears will be allowed to occur where there is suitable habitat and they are socially tolerated. Tolerance generally is reflected through minimization of conflict. Because grizzly bears would not stay exclusively in the CMR National Wildlife Refuge, for them to persist there, there must be social tolerance.

Comment #57: The commission received comments questioning the reliability of the methods used to provide population estimates and believe the science needs to be better to understand what the ecosystem can truly hold.

Response #57: The methods used to monitor the vital rates and model population trajectory are standard, scientifically valid procedures and have been through scientific peer review (Mace et al. 2012). The proposed population objective, translated as a density within the DMA, is comparable to or exceeds reported densities of many interior populations in northern Canada and Alaska, many of which are more remote than the NCDE.

Comment #58: The commission received comments that there needs to be a reduction of livestock allotments within the Recovery Zone in order for grizzly bears to reach the connectivity they once had.

Response #58: We appreciate the feedback but note that this comment is not directly related to the proposed rule. Although there are a number of livestock allotments within the Recovery Zone, we have not experienced much conflict associated with them recently. Most livestock conflicts occur on private lands.

Comment #59: The commission received comments about how climate change and wildfires will impact grizzly bear habitat and food sources.

Response #59: Climate change may alter the grizzly bear habitat and food resources over time within the NCDE. It is unknown if the changes might be beneficial or detrimental to grizzly bears. Nonetheless, climate-driven changes are unlikely to make the habitat unsuitable for grizzly bears, because they are generalists and successfully reside in a wide variety of regions worldwide, including forested, desert, and tundra habitats. Ransom et al. (2018) evaluated potential changes to grizzly bear habitat in the North Cascades Ecosystem and found changes that were both potentially positive and potentially negative. They concluded that “The complex relationship between changes in climate, natural processes, and natural and anthropogenic features will expose grizzly bears to a range of changing resource conditions, but the species low sensitivity to changing climate and high adaptive capacity portends positive long term outcomes if a successful founding population can be re-established.” The NCDE population has met and surpassed recovery goals and our current and proposed monitoring program will continually document survival and reproductive rates. If there are environmental impacts, which adversely impact these rates, we will be able to detect them and account for them in our population modeling and threshold setting. To counteract any potential population decline due to lower reproductive rates, survival thresholds can be set to higher rates and mortality thresholds can be set to lower numbers to facilitate population growth.

Comment #60: The commission received comments about grizzly bears having one of the slowest reproductive rates among terrestrial mammals in North America.

Response #60: The population monitoring program and the modeling structure explicitly account for the observed reproductive rate of grizzly bears in the NCDE and will continue to account for any changes over time.

Comment #61: The commission received comments concerning people who break the rules, and how hunters feel enabled due to insufficient penalties, also suggesting that predators must be managed differently than non-predators.

Response #61: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of

the NCDE grizzly bear population upon delisting. Penalties for wildlife crimes are determined by the Legislature and imposed by judges.

Comment #62: The commission received comments from some who are concerned that grizzly bears are losing their fear of humans and that mutual fear and respect would benefit both humans and bears.

Response #62: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting. Grizzly bears are part of the western Montana landscape which requires outdoor recreationists to be cognizant of the potential for and prepared for encountering a grizzly bear. For example, recreationists should carry and know how to use bear spray. Delisting and return of management to the State of Montana may provide some additional management flexibility vs. present day, but it is unlikely that overall numbers will change much in areas where they are established.

Comment #63: The commission received comments in favor of the state of Montana managing the grizzly bear population, some stating that the recovery of the grizzly bear has been successful.

Response #63: The commission concurs and is committed to ensuring grizzly bears remain recovered.

Comment #64: The commission received comments favoring grizzly bears over ranchers and subdivisions and boycotting any product of Montana.

Response #64: The commission acknowledges the right of all people to act based on their own personal convictions. The mission of FWP is to provide “for the stewardship of the fish, wildlife, parks and recreational resources of Montana, while contributing to the quality of life for present and future generations.” As such, with responsibility to our natural resources and the people of Montana, FWP must ensure the long-term conservation of the grizzly bear populations in Montana, while maximizing human safety and minimizing property losses. The commission believes the best way to maintain a healthy NCDE population and realize connectivity among the grizzly bear populations of Montana is to engender acceptance of the presence of grizzly bears on some private lands, including ranches and rural residences. Experience has already shown us that this can be achieved by recognizing the value of working landscapes for providing habitat for grizzly bears and other species, and by offering expertise and recommendations to land planners to reduce the negative impacts of development on our natural resources.

Comment #65: The commission received comments stating that FWP has no ethical or moral foundation to any of its programs, being committed to the murder of wildlife and fish and managing the species based on what they are worth monetarily, suggesting that FWP encourages violence.

Response #65: These comments are outside the scope of this rulemaking. The purpose of the proposed rule is to set demographic objectives for management of the NCDE grizzly bear population upon delisting.

Comment #66: The commission received comments suggesting that there also be an upper limit on the grizzly bear population based on the carrying capacity.

Response #66: There was a direct need for establishing some procedures to support the long-term persistence of the NCDE grizzly bear population and the population objective in the proposed rule fulfills that need. We anticipate that the upper limit of the population size within the DMA will be at least partially regulated by competition among the bears themselves, through density-dependent mechanisms. We will be able to monitor these mechanisms through our monitoring of survival and reproductive rates. Additionally, an upper limit might also be informed by human attitudes and public input, which might vary over time, thus the proposed rule does not constrain any future decisions about the upper limit of the DMA population size.

Comment #67: The commission received comments expressing concern that predators (bears, wolves, lions, coyotes), are overwhelming prey populations with high predation, and feel that proper management will save more grizzlies' lives in the long term.

Response #67: Management of grizzly bears following the objectives in the proposed rule will ensure a recovered population of grizzly bears while providing management flexibility.

Comment #68: The commission received comments expressing concern that grizzly bears relate human activity or gun shots with food, and that they have no natural predator, some stating that they are unable to hunt in the areas they usually go because there are too many bears.

Response #68: Grizzly bears are part of the western Montana landscape which requires outdoor recreationists to be cognizant of the potential for encountering a grizzly bear and to be prepared for if they do such as carrying and knowing how to use bear spray. Delisting and return of management to the State of Montana may provide some additional management flexibility vs. present day, but it is unlikely that overall numbers will change much in areas where they are established.

/s/ William Schenk
William Schenk
Rule Reviewer

/s/ Dan Vermillion
Dan Vermillion
Chair
Fish and Wildlife Commission

Certified to the Secretary of State December 11, 2018.